

NATIONAL LIBRARY OF MEDICINE Washington



Founded 1836

U. S. Department of Health, Education, and Welfare
Public Health Service









TESTIMONIALS,

SUBMITTED TO THE CONSIDERATION

OF THE

TRUSTEES

OF THE

University of Pennsylvania.



SYLLABUS.

- 1. Testimonial of Dr. Dorsey.
- 2. Letter from Professor Silliman to E. Bronson.
- 3. Testimonial of Dr. Thomas Parke.
- 4. Testimonial of Robert Patterson and Joseph Cloud, Esqrs.
- 5. Testimonial of Dr. Dewees.
- 6. Letter from Dr. Chapman to Joseph Hopkinson Esq.
- 7. Diploma from Harvard University.
- 8. Letter from Dr. Jones to Gen. Cadwalader.
- 9. Extract of a letter from Henry Brevoort, Esq. to John Hare Powell.
- Letter from Professor Mitchell to General Cadwalader.
- 11. Extract from the "Eclectick Repertory, edited by a Society of Physicians," for July, 1817, vol. vii, No. 3, published by Thomas Dobson.
- 12. Testimonials presented to Dr. Hare by his Classes, in William and Mary College.
- 13. Testimonial of the Professor of Mathematicks in William and Mary College.
- 14. Testimonial of Chancellor Nelson, Professor of
 Law in William and Mary College.
- 15. Letter from Dr. Smith President of William and Mary College, to Dr. Hare.
- 16. Testimonial of Professor Silliman.
- 17. Letter from Dr. Thos. G. Peachy to Dr. Thos. C. James.



TESTIMONIAL of DR. DORSEY.

IN the year 1798, I commenced the study of medicine in the University of Pennsylvania, and attended a course of Lectures on Chymistry delivered by Dr. Woodhouse, in whose laboratory I frequently met Mr. Robert Hare, jun. who was at that time engaged in the study of Chymistry. Mr. Hare was zealous in the pursuit; and in the Chymical Society, of which we were both members, he always took an active and conspicuous part. Engaged in similar studies, I passed no inconsiderable portion of my time in company with Mr. Hare, and for several years was the frequent witness of his experimental researches, which have led to results, in my opinion, highly important, and I know of no Chymical discovery which has been made in America, more brilliant than one of which Mr. Hare is the author.

I have therefore, from what I know of Mr. Robert Hare, jun. every reason to believe him perfectly qualified to teach the science of Chymistry. His mind I believe to be peculiarly adapted to this pursuit, and I have no doubt that he will discharge the duties of it, with advantage to his pupils, with reputation to himself, and with honour to any institution with which he may be connected.

(Signed) JOHN SYNG DORSEY.

Philadelphia, June 12, 1809.

LETTER from Professor SILLIMAN to E. BRON-SON, Esq. New Haven, June 15, 1809.

DEAR SIR,—In my letter to you, in answer to your inquiries concerning Mr. Hare, I omitted to mention to you a circumstance of some importance to his reputation. When I was appointed to the Chymical Chair of this College, I was allowed time and opportunities to qualify myself for a station, for which those who appointed me knew, at the time,

that I was not prepared.

I went to Philadelphia, and was so fortunate, as to board in the same house with Mr. Hare. My pursuits and his taste led us to form a small laboratory, where we pursued chymistry with much ardour. It is with pleasure that I say, that I am greatly indebted to the able assistance and instruction which I received from Mr. Hare at that time, for any progress which I made in the science. He had already become, from a good deal of private research, an experienced and able experimenter; and it is no disrespect to the memory of Dr. Woodhouse (whose opinions of Mr. Hare as a Chymist and a man of science, I know to have been extremely favourable) for me to add, that I often derived from the conversation of Mr. Hare at home, views of Chymical science and explanations of Chymical phenomena, which greatly aided my comprehension of the lectures, and even supplied deficiencies, which may occur occasionally in the publick philosophical discourses of the ablest men. I was often surprised as

well as gratified to find in Mr. Hare an extent of comprehension, as well as minuteness of conception and information, which made his society (independently of his attractions as a man and a gentleman) a constant scene of entertainment and instruction to me; and in fact, our conversations (which were rendered more interesting to me from Mr. Hare's having the happy faculty of imparting philosophical views with much perspicuity and ease) became so frequent and long on Chymical subjects, that our companions in the house often rallied us on our devotion to this pursuit.

In a subsequent winter, while I was employed in Philadelphia in planning and writing my own course of lectures, I often derived much aid from Mr. Hare, in a duty which is extremely difficult; because it requires a correct comprehension of the parts and bearings of the whole science, before it can be skilfully arranged into a system of lectures. With the arrangement which I then adopted, I have been so well satisfied, that I have not found occasion to alter it since, in any important point. On the whole, I consider the gentleman who is the subject of this letter as one of the fairest hopes of the science of this country; especially should he, before the ardour of his mind has abated, he able to devote any considerable portion of his time and exertions to the cultivation of science. I remain, dear sir, with much respect, your obedient servant.

BENJAMIN SILLIMAN, Professor of Chymistry, Yale College.

TESTIMONIAL of DR. PARKE.

DEAR SIR,

IN compliance with your request, I have endeavoured to recollect the substance of the conversation that passed between the late Dr. Woodhouse and myself, respecting his opinion of your knowledge of Chymistry; and I believe the following statement is correct.

I was expressing the pleasure I derived from observing the increasing reputation of our medical school, and particularly from viewing the numbers that attended his lectures. The professor replied, that he was much gratified in witnessing the taste for Chymistry had rapidly increased, not only among the students of medicine, but also among gentlemen engaged in other pursuits, and added that he knew few, if any, who had acquired a more accurate knowledge of Chymistry than yourself.

With great respect and esteem,
I am your obliged friend,

THOMAS PARKE.

Robert Hare, jun. Esq. Philadelphia, 15th June, 1809. TESTIMONIAL of ROBERT PATTERSON and JOSEPH CLOUD, Esquires.

Philadelphia, 15th June, 1809.

FROM the knowledge we have of Mr. Robert Hare's Chymical abilities, we have no hesitation in declaring, that we believe him qualified to supply the vacancy occasioned by the death of the late Professor of Chymistry in the University of Pennsylvania. [Signed]

ROBERT PATTERSON.
JOSEPH CLOUD.



TESTIMONIAL OF DR. DEWEES.

HAVING perused a letter from Thomas Fitzsimmons, Esq. in which it is stated that it would be agreeable to the Trustees of the University, to receive information in regard to the Chymical abilities and acquirements of the Candidates for the Professorship of Chymistry, I should deem myself wanting in justice, were I, when called upon by any of the Candidates, to suppress the information which circumstances may have afforded me. On this ground I do not hesitate to communicate that knowledge of Mr. Robert Hare, jun. which I have derived from an

intercourse of several years. In 1799, I first became acquainted with this gentleman, and in the following year found him engaged in the pursuit of Chymistry, both by study and experiment—Since which time I have been a frequent visiter at his laboratory, and have been witness of his researches, of which he has always given the most satisfactory explanation. I have frequently proposed to him questions that to me seemed obscure, and have always obtained sufficient elucidation. Chymistry has been, in fact, the most frequent topick of our conversations.

On grounds such as these I have not hesitated to adopt the opinion, that this gentleman's mind is peculiarly fitted for the investigation of Chymical science; and I consider him well acquainted with it in its various relations to the arts and to medicine. Its connexion with the latter has been the most frequent subject of our disquisitions.

WILLIAM P. DEWEES,

LETTER from Dr. CHAPMAN to JOSEPH HOP-KINSON, Esq.

DEAR SIR,

PERCEIVING no impropriety or indelicacy in my making the statement which you have required of me respecting the pretensions of Mr. Hare to the Chymical professorship. I will do it very cheerfully. During the whole or greater part of the time that I was a student of medicine in our University, Mr. Hare attended with me the lectures of the late Dr. Woodhouse, and certainly prosecuted the study of the science with uncommon ardour and success. I also belonged for several years with him to the Chymical Society of this city, in which he was deservedly held as one of its most leading and distinguished members. This, however, will more satisfactorily appear by consulting the minutes of the society, where it will be seen that he always was placed on the Committees appointed to explore or elucidate the obscure and intricate parts of Chymistry. In conducting these inquiries his skill and ingenuity were very advantageously displayed, and sometimes were rewarded by discoveries not less brilliant than useful.

Means of producing a sufficient degree of temperature to melt some of the metals, and other refractory substances had long been desired by artists, and hitherto had fruitlessly engaged the attention of Chymists. At the suggestion of Mr. Hare, the

society selected this subject as worthy of their examination, and he was deputed to manage the investigation of it. The result of his labours was a discovery which has been emphatically pronounced by a great Chymist of Europe, to be one of the most important of the 18th century.

I am moreover well informed, that Mr. Hare did originally deliver in the Chymical Society the true explanation of those phenomena, connected with the decomposition of water, which had baffled the disciples of the New Chymistry, to reconcile with its principles, and had given to its adversaries their strongest weapons of attack. This explanation is I believe, now universally adopted both here and abroad.

But, sir, I am detailing with unnecessary minuteness the merits of Mr. Hare. They have already been acknowledged on all hands. Those who know him best and are competent to decide, have born evidence to the extent of his acquisitions in the philosophy of the science, to the dexterity of his manipulations, and to the peculiar aptitude of his mind to the cultivation of those pursuits. The late Dr. Woodhouse, it is known to many, entertained the highest respect for his attainments, and often regretted, that a genius so well adapted to Chymistry could not be applied altogether to its improvement.

With respect to the incapacity of Mr. Hare, arising out of his want of a medical education, to which you allude, I must say that it strikes me with no

force, and that it can hardly be pressed, I presume, by his opponents.

It is too notorious to be contradicted, that a large majority of the teachers of Chymistry in the schools of Europe are not physicians. Those who enjoyed the best reputation, and were most followed in my time, by the medical students, were Davie of London, Murray of Edinburgh, and Vauquelin of Paris, neither of whom had any knowledge of physick. Look in short, into the list of celebrated Chymists, and see how few are medical characters. The truth is, sir, that in conducting a medical education, it is the duty of the teacher of materia medica to apply Chymistry to medicine, as was candidly admitted a few days ago in my presence by Professor Barton. -This is conformable to the usage of our own University, as well as those of Europe. Though, perhaps, I have attended as many lectures on Chymistry as any person in the United States, yet I never knew one who attempted to mingle practical medicine with that science. They have uniformly been treated as branches distinct and independent.

I am, dear sir, yours most truly,
[Signed] N. CHAPMAN.

DIPLOMA from Harvard University.
Senatus Universitatis Harvardiance Cantabrigiensis,

IN

REPUBLICA MASSACHUSETTENSI;

Omnibus ad quos literæ presentes pervenerint, salutem in Domino sempiternam.

CUM eum in finem Gradus Academici instituti fuerint, ut viri disciplina, sapientia, et virtute, insignes, qui et de Re literaria et de Republica bene meruerint, Honoribus Laureatis remunerentur, maxime decet quod hujusmodi honore afficiatur Vir ille præclarus ROBERTUS HARE, A. M. literatura optima scientiisque-utilissimis ornatus, physiologia eruditus, et CHEMIÆ ARTE et SCIENTIAPRÆCIPUE versatus. Notum, igitur, esto, quod PRÆSES ET Socii, consentientibus honorandis admodum ac reverendis Universitatis supra dictæ Inspectoribus, ROBER-TUM HARE, A. M. supra nominatum, in MEDI-CINA, honoris causa DOCTOREM renunciaverunt et constituerunt; eique omnia Insignia, Jura, et Privilegia, Dignitates ac Honores ad istum gradum quaqua pertinentes dederunt atque concesserunt.

DATUM in Comitis Academicis Cantabrigiæ apud Novanglos habitis die Martii Septimo Annoque Domini nostri millesimo octingentesimo decimo sexto: In cujus rei testimonium Literis hisce communi Sigillo munitis apposuimus chirographa.

Johs. Thornton Kirkland, S. T. D. L. L. D. Pres.

JOHANNES LOWELL, L. L. D.
JOHANNES PHILLIPS,

GULIELMUS E. CHANNING, V. D. M. SAMUEL C. THACHER, V. D. M.

JOHANNES DAVIS, L. L. D. Thesaurarius.

LETTER from Dr. JONES to GENERAL CADWA-LADER.

Williamsburgh, March 22d, 1816.

SIR,—IT gives me great pleasure to reply to the inquiry contained in your favour of the 14th inst. as the subject is one upon which I can speak without hesitation.

Mr. Hare has distinguished himself not only by his knowledge of Chymistry, but by having made valuable contributions both to the means, and the objects of chymical inquiry; and is in consequence advantageously known to the Chymists of Europe. I have ever regretted that other avocations had called his attention from a pursuit in which he had shown himself so eminently qualified to excel.

Should my opinion have any influence in promoting his appointment to the Chymical chair in the University of Pennsylvania, I shall felicitate myself on having promoted the interests of that institution in particular, and the cause of science in general.

The mechanical skill possessed by Mr. Hare is an advantage of high importance, as it renders perfectly easy that which without it would frequently be relinquished as impossible. This advantage, as useful to the institution as to the professor, is not likely to be obtained in any other candidate for the chair.

I am with great respect,
Sir, your obedient servant,
THOMAS P. JONES, Professor of Chymistry
at William and Mary College.

Extract of a letter from HENRY BREVOORT, Esq. to JOHN HARE POWELL.

DURING my attendance of a course of lectures on Chymistry in the winter of 1813, delivered in the College of Edinburgh, Dr. Hope, the Professor, in describing the construction of your brother's blowpipe, mentioned his name in the terms following:

"For the invention of this very ingenious machine, we are indebted to Mr. Robert Hare, jun. of Philadelphia; a gentleman whose merits claim a distinguished rank amongst the successful promoters of Chymistry, in the United States of America."

[Signed] HENRY BREVOORT. New York, Feb. 29th, 1816.



LETTER from Professor MITCHELL to General CADWALADER.

New York, March 23d, 1816.

SIR,

I HAVE not answered your letter of the 14th inst. earlier, on account of a violent attack of the croop, which has incommoded me excessively. You honour me very much by asking my opinion concerning the qualifications of Mr. Hare to teach Chymistry as a Professor in the University of Pennsylvania. This gentleman has been known to me for ten years or more. I have perused some of the pages he has published on Chymical subjects. I have uni-

formly found him ardent in the pursuit of that kind of science. His actual attainments are of the high and respectable order, and he seems to be particularly qualified for devising and constructing experiments. It gives me pleasure to write you this opinion; and be assured, sir, of my service and respect.

[Signed] SAMUEL L. MITCHELL.

Extract from the Ecleorick Repertory, edited by a Society of Physicians, for July 1817, Vol. vii., No. 3, published by Thomas Dobson.

Yale College, April 7th, 1817.

VARIOUS notices, more or less complete, chiefly copied from English newspapers, are now going the round of the publick prints in this country, stating that " a new kind of fire" has been discovered in England; or, at least new, and heretofore unparalleled means of exciting heat, by which the gems, and all the most refractory substances in nature, are immediately melted, and even in various instances, dissipated in vapour, or decomposed into their elements. The first glance at these statements (which, as regards the effects, I have no doubt are substantially true) was sufficient to satisfy me, that the basis of these achievements was laid by an American discovery, made by Mr. Robert Hare, of Philadelphia, in 1801. In December of that year, Mr. Hare communicated to the Chymical Society of Philadelphia, his discovery of a method of burning oxy-

gen and hydrogen gasses in a united stream, so as to produce a very intense heat. In 1802, he published a detailed memoir on the subject, with an engraving of his apparatus; and he recited the effects of his instrument, some of which, in the degree of heat produced, surpassed any thing before known. In 1:02 and 1803, I was occupied with him in Philadelphia, in prosecuting similar experiments on a more extended scale; and a communication on the subject was made to the Philosophical Society of Philadelphia. The Memoir is printed in their Transactions; and Mr. Hare's original Memoir was reprinted in the Annals of Chymistry in Paris, and in the Philosophical Magazine in London. Mr. Murray, in his System of Chymistry, has mentioned Mr. Hare's results in the fusion of several of the earths, &c. and has given him credit for his discovery.

In one instance, while in Europe, in 1806, at a publick lecture, I saw some of them exhibited by a celebrated professor, who mentioned Mr. Hare as the reputed author of the invention.

In December, 1811, I instituted a course of experiments with Mr. Hare's blow-pipe, in which I melted lime and magnesia, and a long list of the most refractory minerals, gems, and others, the greater part of which had never been melted before, and I supposed that I had decomposed lime, barytes, strontites and magnesia, evolving their metallick bases which burnt in the air as fast as produced. I communicated a detailed account of my experiments to the Connecticut Academy of Arts and Sciences,

who published it in their Transactions for 1812. With their leave it was communicated to Dr. Bruce's Mineralogical Journal, and it was printed in the 4th No. of that work. Hundreds of my pupils can testify, that Mr. Hare's splendid experiments, and many others performed with his blow-pipe, fed by oxygen and hydrogen gasses, have been for years past annually exhibited in my publick courses of Chymistry in Yale College; and that the fusion of the earths, of rock crystal, of gun-flint, of the corundum gems, and many other very refractory substances, and the production of light beyond the brightness of the sun, have been familiar experiments in my laboratory. I have uniformly given Mr. Hare the full credit of the invention, although my researches with his instrument had been pushed farther than his own, and a good many new results added.

It is therefore with no small surprise, that in the Annales de Chimie et de Physique, for September, 1816 (a French Journal) I found a translation of a very elaborate Memoir, from a scientifick Journal, published at the Royal Institution in London, in which a full account is given of a very interesting series of experiments performed by means of Mr. Hare's instrument, or one on the same principle, but without any notice being taken of Mr. Hare's invention or experiments, or of mine; and the whole is exhibited as original. On a comparison of the Memoir in question, with Mr. Hare's and with my own, I find that very many of the results are

identical, and all the new ones are derived directly from Mr. Hare's instrument, with the following difference:—In Mr. Hare's the two gasses were in distinct reservoirs to prevent explosion. They were propelled by the pressure of a column of water, and were made to mingle, just before their exit, at a common orifice. In the English apparatus, the gasses are both in one reservoir, and they are propelled by their own elasticity, after condensation by a syringe.

Professor Clarke, of Cambridge University, the celebrated traveller, is the author of the memoir in question; and we must presume that he was ignorant of what had been done by Mr. Hare and myself, or he would candidly have adverted to the

facts.

Measures have been taken to set this matter right in Europe; but in the mean time, whatever treatment the subject may receive there, it is proper that the American publick should know that Mr. Hare was the inventor of the instrument, with which in Europe they are now performing the most brilliant and beautiful experiments, and that there are very few of the results hitherto obtained there by the use of it (and the publication of which has there excited great interest) which were not several years ago anticipated here, either by Mr. Hare or by myself.

As I have cited only printed documents, or the testimony of living witnesses, I trust my countrymen will not consider this communication as indeli-

cate or arrogant, but simply a matter of justice to the interests of American science, and especially to Mr. Hare. BENJAMIN SILLIMAN.

TESTIMONIALS presented to Dr. HARE, Professor of Chymistry and Natural Philosophy, in William and Mary College, by the Junior and Senior Students attending his Chymical Lectures.

WE whose names are hereunto subscribed, do certify, upon a review of the course of Chymical Lectures delivered by Dr. Hare, during the present session in this institution, that he has explained the principles of Chymistry to his class, with perspicuity and ability, exhibiting a great variety of experiments successfully executed, and well adapted for the purpose of elucidating the subject for which they were introduced. We moreover acknowledge, and take this mode of expressing our thanks, that we are indebted to him, not only for the fidelity with which he has discharged his duties in the lecture room, but more especially for his laborious and unparalleled exertions which he made for the class in the laboratory, in renovating and preparing the apparatus so as to ensure as far as possible the success of the experiments, and to enlarge their sphere.

Signed, &c.

Williamsburgh, June 2d, 1818.

TESTIMONIAL unanimously signed by Dr. HARE's Pupils in the Chymical and Philosophical Classes in William and Mary College.

[COPY.]

WE the undersigned members of Dr. Hare's classes, understanding that a report has reached Philadelphia, and is there circulated, in which it is stated, that Dr. Hare is disliked by, and is unpopular with those who attend his Lectures, take this means of rectifying any evil impressions, which such report may have caused, and of testifying our respect and esteem for him as a gentleman, and the high opinion we entertain of his abilities as a professor.

Signed, &c. June 17th, 1818.

TESTIMONIAL of the Professor of Mathematicks in William and Mary College.

HAVING been a regular attendant on the Chymical Lectures of Dr. Hare this spring, I am enabled to say, that speaking extempore with little time for preparation, he has satisfactorily explained the principles of Chymistry, and illustrated them by a great number of experiments, in the exhibition of which he has been very successful, and discovered much ingenuity and manual dexterity.

As a lecturer, Dr. Hare possesses advantages which deserve particular notice. From his great experience in Chymical pursuits, he has never appeared to be at a loss in expounding the most difficult phenomena which the science presents; and by the force of a talent which seems peculiar to himself, he is enabled to attract and rivet the attention in discussing the most ordinary and familiar topicks. His success in the manipulations, in my opinion, is not owing more to the care with which he selects his agents, than to the mechanical skill with which he prepares his apparatus, or supplies it entirely where it is found wanting.

In fine, Dr. Hare is most enthusiastically devoted to his profession, and it is obvious to all who attend to the character of his pursuits when not engaged in the exercises of the college, that he possesses a genuine love for philosophical inquiry, and that he regards science almost exclusively as the business of his life.

FERDINAND S. CAMPBELL.

Williamsburgh, 20th May, 1818.

TESTIMONIAL of CHANCELLOR NELSON, Professor of Law, in William and Mary College.

I HAVE attended many of the Lectures of Dr. Hare, during the course, in the college of William and Mary, and found his experiments, and the explanation of them very satisfactory. I remember no instance in which his experiments did not succeed.

ROBERT NELSON.

Williamsburgh, 23d May, 1818.



Copy of a LETTER from Dr. SMITH, President of William and Mary College, to Dr. HARE.

Dear Sir,

I TAKE great pleasure in stating, that in the course of Lectures which you have delivered here on Chymistry, you have evinced, as far as I am able to judge, great acquirements in that science, and have certainly used exertions almost unparalleled, amidst difficulties the most perplexing and harassing. Very respectfully,

Your obedient servant,

[Signed] J. AUG. SMITH. William and Mary College, May 20, 1818.

[COPY.]

TESTIMONIAL from Professor SILLIMAN.

New Haven, June 22, 1818.

PROFESSOR ROBERT HARE, now of the college at Williamsburgh, Virginia, has been personally and intimately known to me since November, 1802. my opinion, he possesses a mind distinguished for energy, invention, and active scientifick curiosity. His acquisitions are various and extensive in many departments of knowledge; but he excels in mechanicks, natural philosophy, and chymistry, to all which he has devoted much attention, and evidently needs nothing but the entire and professional devotion of his time to them to attain the highest excellence, especially at a period of life combining both ardour and maturity. I have been much occupied with him as a fellow labourer in practical Chymistry, and have seen abundant evidence of his unwearied industry, and fertility of resource. He has also devoted a good deal of time with me to the study of mineralogy and geology.

[Signed] BENJAMIN SILLIMAN,
Professor, &c. &c. in Yale College.

Extract of a letter from Dr. THOS. G. PEACHY, of Williamsburgh, to Dr. THOS. C. JAMES, Professor in the University of Pennsylvania.

Williamsburgh, (Va.) July 4, 1818.

My dear Sir,

I CAN with confidence state to you, that from conversations I have had with some of the Students, I have every reason to believe, that no Professor whatever (alluding to Dr. Hare) can possess a greater share of the respect and affections of his pupils. We should regret extremely our own loss, as well as that our college would sustain; but we could not be so selfish as to wish him to remain, could he obtain the Professorship in Philadelphia.

Your ever grateful friend, 'THOS, G. PEACHY.











HEAL HE

